

MAY 27 2008

## Exhibit B 510(K) SUMMARY

This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR §807.92(c).

The assigned 510(k) number is: K081320

### 1. Submitter:

Shenzhen Mindray Bio-medical Electronics Co., LTD  
Mindray Building, Keji 12th Road South, Hi-tech Industrial Park, Nanshan,  
Shenzhen, 518057, P. R. China

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### Contact Person:

Li Dongling  
Shenzhen Mindray Bio-medical Electronics Co., LTD  
Mindray Building, Keji 12th Road South, Hi-tech Industrial Park,  
Nanshan, Shenzhen, 518057, P. R. China

Date Prepared: April 18, 2008

### 2. Device Name: DC-3/DC-3T Diagnostic Ultrasound System

#### **Classification**

Regulatory Class: II

Review Category: Tier II

21 CFR 892.1550 Ultrasonic Pulsed Doppler Imaging System (90-IYN)

21 CFR 892.1560 Ultrasonic Pulsed Echo Imaging System (90-IYO)

21 CFR 892.1570 Diagnostic Ultrasound Transducer (90-ITX)

### 3. Marketed Device:

DC-3/DC-3T Diagnostic Ultrasound System is substantially equivalent to the following devices: Mindray M5 (K#080640), Mindray DC-6 (K#072164).

### 4. Device Description:

The DC-3/DC-3T is a general purpose, mobile, software controlled, ultrasonic

diagnostic system. Its function is to acquire and display ultrasound data in B-Mode, M-Mode, PW-Mode, Color-Mode, Power-Mode, Dirpower-Mode or the combined mode (i.e. B/M-Mode). This system is a Track 3 device that employs an array of probes that include linear array and convex linear array with a frequency range of approximately 2.5 MHz to 12 MHz.

### **5. Intended Use:**

The DC-3/DC-3T diagnostic ultrasound system is applicable for adults, pregnant women, pediatric patients and neonates. It is intended for use in fetal -OB/GYN, abdominal, pediatric, small parts (breast, thyroid, testicle, etc), neonatal cephalic, transvaginal, transrectal, peripheral vascular, and musculoskeletal (conventional and superficial) exams.

### **6. Safety Considerations:**

The DC-3/DC-3T Diagnostic Ultrasound System has been tested as Track 3 Device per the FDA Guidance document "Information for Manufacturers Seeking Marketing Clearance of Diagnostic Ultrasound Systems and Transducers" issued September 1997. The acoustic output is measured and calculated per NEMA UD 2 Acoustic Output Measurement Standard for Diagnostic Ultrasound Equipment: 2004 and NEMA UD 3 Output Display Standard. The device conforms to applicable medical device safety standards, such as IEC 60601-1, IEC 60601-1-2, IEC 60601-2-37 and ISO 10993-1.

### **Conclusion:**

The conclusions drawn from testing of the DC-3/DC-3T Diagnostic Ultrasound System demonstrate that the device is as safe and effective as the legally marketed predicate devices.



JUL 3 2008

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Shenzhen Mindray Bio-Medical Electronics Co., Ltd.  
% Mr. Robert Mosenkis  
President  
Citech  
5200 Butler Pike  
PLYMOUTH MEETING PA 19462-1298

Re: K081320

Trade/Device Name: DC-3 and DC-3T Diagnostic Ultrasound System  
Regulation Number: 21 CFR 892.1550  
Regulation Name: Ultrasonic pulsed doppler imaging system  
Regulatory Class: II  
Product Code: IYN, IYO, and ITX  
Dated: May 9, 2008  
Received: May 12, 2008

Dear Mr. Mosenkis:

This letter corrects our substantially equivalent letter of May 27, 2008.

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the DC-3 and DC-3T, as described in your premarket notification:

Transducer Model Number

3C5A  
6CV1  
7L4A, 7L6, 10L4

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>

If you have any questions regarding the content of this letter, please contact Lauren Hefner at (240) 276-3666.

Sincerely yours,



*for* Nancy C. Brogdon  
Director, Division of Reproductive,  
Abdominal and Radiological Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

## Diagnostic Ultrasound Indications for Use Form

System X Transducer \_\_\_\_\_  
 Model: DC-3, DC-3T  
 510(k) Number(s) \_\_\_\_\_

Clinical Application	Mode of Operation									
	A	B	M	PW D	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify)
Ophthalmic										
Fetal		N	N	N		N	N		N	Note 1, 2, 3
Abdominal		N	N	N		N	N		N	Note 1, 2, 3
Intraoperative (specify)*										
Intraoperative Neurological										
Pediatric		N	N	N		N	N		N	Note 1, 2, 3
Small organ(specify)**		N	N	N		N	N		N	Note 2, 3
Neonatal Cephalic		N	N	N		N	N		N	Note 2, 3
Adult Cephalic										
Cardiac										
Transesophageal										
Transrectal		N	N	N		N	N		N	Note 2, 3
Transvaginal		N	N	N		N	N		N	Note 2, 3
Transurethral										
Intravascular										
Peripheral Vascular		N	N	N		N	N		N	Note 2, 3
Laparoscopic										
Musculo-skeletal Conventional		N	N	N		N	N		N	Note 2, 3
Musculo-skeletal Superficial		N	N	N		N	N		N	Note 2, 3
Other (specify)***		N	N	N		N	N		N	Note 2, 3

N=new indication; P=previously cleared by FDA; E=added under Appendix E

Additional comments: Combined modes: B+M, PW+B, Color + B, Power + B, PW +Color+ B, Power + PW +B.

\*Intraoperative includes abdominal, thoracic, and vascular etc.

\*\*Small organ-breast, thyroid, testes, etc.

\*\*\*Other use includes Urology/Prostate.

Note 1: Tissue Harmonic Imaging. The feature does not use contrast agents.

Note 2: Smart3D

Note 3: iScape

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation(ODE)

Prescription USE (Per 21 CFR 801.109)

(Division Sign-Off)

Division of Reproductive, Abdominal and  
Radiological Devices

510(k) Number K081320

0071

## Diagnostic Ultrasound Indications for Use Form

System \_\_\_\_\_ Transducer X  
 Model: 3C5A  
 510(k) Number(s) \_\_\_\_\_

Clinical Application	Mode of Operation									
	A	B	M	PW D	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify)
Ophthalmic										
Fetal		N	N	N		N	N		N	Note 1, 2, 3
Abdominal		N	N	N		N	N		N	Note 1, 2, 3
Intraoperative (specify)*										
Intraoperative Neurological										
Pediatric		N	N	N		N	N		N	Note 1, 2, 3
Small organ(specify)**										
Neonatal Cephalic										
Adult Cephalic										
Cardiac										
Transesophageal										
Transrectal										
Transvaginal										
Transurethral										
Intravascular										
Peripheral Vascular										
Laparoscopic										
Musculo-skeletal Conventional										
Musculo-skeletal Superficial										
Other (Urology)										

N=new indication; P=previously cleared by FDA; E=added under Appendix E

Additional comments: Combined modes: B+M, PW+B, Color + B, Power + B, PW +Color+ B, Power + PW +B.

\*Intraoperative includes abdominal, thoracic, and vascular etc.

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Division of Reproductive, Abdominal and  
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510(k) Number

K081320

0072

## Diagnostic Ultrasound Indications for Use Form

System \_\_\_\_\_ Transducer X  
 Model: 6CV1  
 510(k) Number(s) \_\_\_\_\_

Clinical Application	Mode of Operation									
	A	B	M	PW D	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify)
Ophthalmic										
Fetal		N	N	N		N	N		N	Note 2, 3
Abdominal										
Intraoperative (specify)*										
Intraoperative Neurological										
Pediatric										
Small organ(specify)**										
Neonatal Cephalic										
Adult Cephalic										
Cardiac										
Transesophageal										
Transrectal		N	N	N		N	N		N	Note 2, 3
Transvaginal		N	N	N		N	N		N	Note 2, 3
Transurethral										
Intravascular										
Peripheral Vascular										
Laparoscopic										
Musculo-skeletal Conventional										
Musculo-skeletal Superficial										
Other (specify)***		N	N	N		N	N		N	Note 2, 3

N=new indication; P=previously cleared by FDA; E=added under Appendix E

Additional comments: Combined modes: B+M, PW+B, Color + B, Power + B, PW +Color+ B, Power + PW +B.

\*Intraoperative includes abdominal, thoracic, and vascular etc.

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\*\*\*Other use includes Urology.

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Prescription USE (Per 21 CFR 801.109)

  
 (Division Sign-Off)  
 Division of Reproductive, Abdominal and  
 Radiological Devices  
 510(k) Number K081320

0073

## Diagnostic Ultrasound Indications for Use Form

System \_\_\_\_\_ Transducer × \_\_\_\_\_  
 Model: 7L4A, 7L6, 10L4  
 510(k) Number(s) \_\_\_\_\_

Clinical Application	Mode of Operation									
	A	B	M	PW D	CWD	Color Doppler	Amplitude Doppler	Color Velocity Imaging	Combined (specify)	Other (specify)
Ophthalmic										
Fetal										
Abdominal										
Intraoperative (specify)*										
Intraoperative Neurological										
Pediatric										
Small organ(specify)**		N	N	N		N	N		N	Note 2, 3
Neonatal Cephalic		N	N	N		N	N		N	Note 2, 3
Adult Cephalic										
Cardiac										
Transesophageal										
Transrectal										
Transvaginal										
Transurethral										
Intravascular										
Peripheral Vascular		N	N	N		N	N		N	Note 2, 3
Laparoscopic										
Musculo-skeletal Conventional		N	N	N		N	N		N	Note 2, 3
Musculo-skeletal Superficial		N	N	N		N	N		N	Note 2, 3
Other (specify)										

N=new indication; P=previously cleared by FDA; E=added under Appendix E

Additional comments: Combined modes: B+M, PW+B, Color + B, Power + B, PW +Color+ B, Power + PW +B.

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